

AMENDMENTS TO THE CLAIMS

Claims 1-9 (Cancelled).

10. (Previously presented) A semiconductor memory device including: an amplifier; and first and second paired memory cells each having a gate electrode formed on a semiconductor layer via a gate insulating film, a channel region disposed below the gate electrode, a diffusion region disposed on both sides of the channel region and having a conductive type opposite to that of the channel region, and memory functional units formed on both sides of the gate electrode and having a function of retaining charges and being an insulator containing a silicon nitride film; wherein outputs of the paired memory cells are inputted to the amplifier.

11. (Previously presented) A semiconductor memory device including:
an amplifier; and first and second paired memory cells each having a gate electrode formed on a semiconductor layer via a gate insulating film, a channel region disposed below the gate electrode, a diffusion region disposed on both sides of the channel region and having a conductive type opposite to that of the channel region, and memory functional units formed on both sides of the gate electrode and having a function of retaining charges; wherein outputs of the paired memory cells are inputted to the amplifier, and wherein the gate electrodes of the paired memory cells integrally function as a word line, and the paired memory cells integrally share the memory functional units at both sides of the gate electrodes.

12. (Original) The semiconductor memory device according to claim 10, wherein the memory cell is rewritable in first and second storing states of different amounts of charges accumulated in the memory functional units and, at the time of reading, one of the paired memory cells is in the first storing state, and the other memory cell is allowed to operate in the second storing state.

13. (Previously presented) A semiconductor memory device including:
an amplifier; and first and second paired memory cells each having a gate electrode